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CORPORATION FILE

# SHELL OIL COMPANY

## *Annual Report 1960*

# SHELL OIL COMPANY

50 WEST 50TH STREET · NEW YORK 20, N. Y.

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## TRANSFER AGENTS

IRVING TRUST COMPANY......1 Wall Street, New York 15, N. Y.

THE BANK OF CALIFORNIA NATIONAL ASSOCIATION......400 California Street, San Francisco 20, Calif.

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO ....231 South LaSalle Street, Chicago 90, Ill.

*Notice of change of shareholder's address should be sent to one of the above transfer agents.*

## REGISTRARS

MORGAN GUARANTY TRUST COMPANY OF NEW YORK......140 Broadway, New York 15, N. Y.

CROCKER-ANGLO NATIONAL BANK......1 Montgomery Street, San Francisco 20, Calif.

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# HIGHLIGHTS OF THE YEAR

## *Financial*

| | 1960 | 1959 |
|---|---|---|
| Revenue | $1,838,483,000 | $1,819,954,000 |
| Net Income | $144,588,000 | $147,418,000 |
| Net Income per Share | $2.39 | $2.43 |
| Cash Dividends per Share | $1.10 | $1.02½ |
| Cash Income (net income plus write-offs) | $345,608,000 | $342,807,000 |
| Working Capital at End of Year | $298,216,000 | $284,606,000 |
| Cash and Short Term Securities at End of Year | $118,418,000 | $159,459,000 |
| Long Term Debt at End of Year | $200,002,000 | $133,478,000 |
| Capital Expenditures | $284,041,000 | $280,073,000 |

## *Operating*

| | 1960 | 1959 |
|---|---|---|
| Number of Wells Drilled | 970 | 1,053 |
| Gross Crude Oil Produced—Barrels | 135,420,000 | 133,428,000 |
| Net Crude Oil Produced—Barrels | 117,156,000 | 115,304,000 |
| Crude Oil Intake—Barrels | 183,377,000 | 178,760,000 |
| Refined Products Sold—Barrels | 211,318,000 | 204,966,000 |
| Chemical Products Sold—Short Tons | 1,040,000 | 1,070,000 |
| Number of Employees at End of Year | 38,290 | 38,217 |
| Salaries, Wages and Employee Benefits | $346,262,000 | $341,567,000 |

SHELL OIL COMPANY
50 WEST 50TH STREET
NEW YORK 20, N. Y.

March 15, 1961

## TO THE SHAREHOLDERS:

WE SUBMIT herewith a review of the operations of Shell Oil Company and its subsidiaries for the year 1960, together with the related financial statements.

The consolidated net income after taxes amounted to $144,588,000, a decrease of 1.9% compared with the previous year. Record sales and other operating revenues amounting to $1,827,832,000 were adversely affected by a slight decline in unit returns and were offset by somewhat higher costs.

Earnings for the year represent $2.39 per share, as compared to $2.43 for 1959. Dividend payments for each quarter of the year were 27½ cents per share; total payments were $66,631,000.

Capital expenditures during the year amounted to $284,041,000, as compared with $280,073,000 in 1959. About 70% of this total was expended for exploration and production activities, while marketing obtained approximately 12%, a new high for capital outlay in that area.

During 1960 the remaining $75,000,000 available under the $100,000,000 bank credit arranged in 1959 was drawn down, and the final payment of $25,000,000 was made on a 1955 bank loan.

Crude oil production, including royalty oil, amounted to 135,420,000 barrels in 1960 compared to 133,428,000 barrels in 1959. At the year's end, the Company's proven crude oil and gas reserves showed a significant increase over those estimated for the beginning of the year.

In the Gulf of Mexico, 35 miles off the coast of Louisiana, the Company drilled and brought into production the first oil well completed with its wellhead equipment placed on the sea bottom of the Continental Shelf of the United States. The equipment used was designed by Shell Development Company and is considered to be a significant step forward in the technique of development of offshore oil and gas fields.

In its manufacturing capital expenditures program, the Company continued to emphasize product upgrading and quality improvement, together with operating economy, rather than expansion of capacity. Our refinery operations approximated 85% of rated crude oil distilling capacity, a total of 183,377,000 barrels being processed during the year as compared with 178,760,000 barrels during 1959.

The demand for petroleum products in the United States during 1960 increased approximately 2% for the Industry over 1959, Shell's sales increasing slightly over 3%. It is estimated that Industry demand for refined products in 1961 will rise by about 2%. Shell's accelerated program of retail outlet development, continued in 1960, is designed to increase our share of Industry business.

Average unit prices for products were slightly below those for 1959. However, at the end of the year, as unusually colder weather prevailed, the supply and demand relationships of crude oil and refined products improved with a resulting firming effect on prices.

Shell Chemical Company's sales revenue continued to increase, and established a new record high, although the nation's lower rate of industrial activity caused a tapering off toward the end of the year.

In recognition of the importance of research in developing and improving all our processes and products, the activities of Shell Development Company remained at a high level.

At about year-end, some far-reaching changes were made in our programs for advertising Shell products. Several new concepts will be used in the future in presenting our products to the public. We hope that these new ideas will produce the greatest benefits from our advertising expenditures.

Broadly based public relations programs designed to increase awareness and appreciation of the Company were carried forward during the year.

A number of the basic problems which have plagued the Industry in recent years continue to exist. Problems of oversupply and surplus capacities are still with us, but what changes have occurred in the past year have been improvements. Taking a broad view, we are most optimistic about the ability of our Company to prosper in the years ahead. Our confidence is based in large part upon the continued loyal and efficient services rendered by the employees of the organization, to whom we wish to express our thanks.

J. H. LOUDON
*Chairman of the*
*Board of Directors*

MONROE E. SPAGHT
*President*

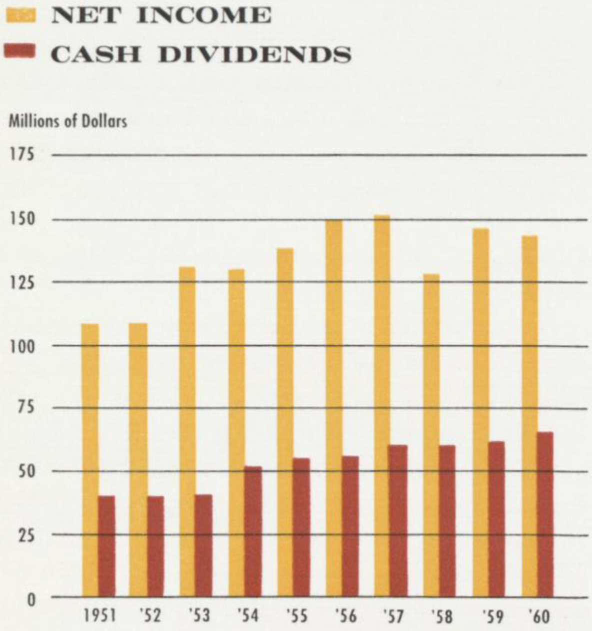
# REVIEW OF 1960 OPERATIONS

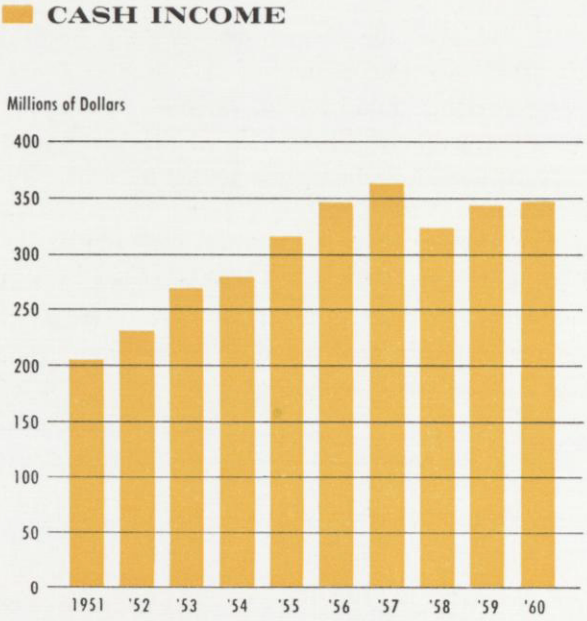
## *Financial*

NET INCOME for 1960 was $144,588,000 compared to $147,418,000 in 1959, or $2.39 and $2.43 a share, respectively, based on 60,573,368 shares outstanding at December 31, 1960. The 27½ cents quarterly dividend rate, made effective with the fourth quarter of 1959, was maintained during 1960. Dividend payments totaled $66,631,000 or $1.10 per share, compared to $62,088,000 or $1.02½ per share in 1959. Cash income was $345,608,000 in 1960 compared to $342,807,000 in 1959.

Sales and other operating revenues amounted to $1,827,832,000, slightly above the previous high of $1,809,953,000 reached in 1959. Sales volume of natural gas and refined products reached new highs and improved approximately 18% and 3%, respectively, over 1959. Crude oil and natural gas production were at all time record levels for the Company. These factors, however, were more than offset by the effects of competitive pressure on refined product prices and by generally higher costs and expenses. Automotive gasoline prices did show some improvement in the last half of the year over the same period for the year before, but the average price for the full year was relatively unchanged from 1959.

With a program designed to accelerate growth in all branches of the Company, capital expenditures in 1960 totaled $284,041,000, compared with $280,073,000 in 1959. A $36,417,000 outlay for acquisition of





additional Gulf Coast acreage reflects a continuation of our aggressive leasing program. Spending for expansion and improvement of marketing facilities was higher than last year. The relative allocation of capital expenditures by major function is shown in the following tabulation:

| | 1960 | 1959 |
|---|---|---|
| Drilling and production | 70% | 71% |
| Oil refineries | 10 | 11 |
| Chemical plants | 6 | 8 |
| Pipe line and other transportation facilities | 2 | 2 |
| Marketing and miscellaneous facilities | 12 | 8 |
| | 100% | 100% |

In addition, $69,833,000 was charged directly to income for exploration activities related to but not included in the drilling and production capital expenditure program.

Net working capital at December 31, 1960, amounted to $298,216,000 as compared to $284,606,000 at December 31, 1959. Cash and short term securities totaled $118,418,000 at the close of the year as compared to $159,459,000 at the end of 1959, the decrease resulting mainly from continued high capital expenditures and advances to Shell Oil Company of Canada, Limited.

During 1960, the remaining $75,000,000 available under the $100,000,000 bank credit arranged in August 1959 was drawn down, and the final $25,000,000 was repaid on a 1955 bank loan.

## *Exploration and Production*

EXPLORATION ACTIVITIES and development drilling continued to be pursued aggressively throughout 1960, resulting in the addition of substantial new reserves, while a strong lease position was maintained in promising areas. A new high was reached in the quantity of hydrocarbons produced during the year; however, severe prorationing of production continued in many fields.

During the year the dispute between the Federal Government and the States of Louisiana, Texas, Mississippi, Alabama and Florida, involving ownership of the submerged lands in the Gulf of Mexico beyond the three nautical mile limit, was settled by a decision of the United States Supreme Court. This decision upheld the Federal Government's contention that the States of Louisiana, Mississippi and Alabama owned no submerged lands or minerals underlying the Gulf of Mexico beyond three nautical miles from their respective coastlines. With regard to the States of Texas and the west coast of Florida, the Court held they owned the submerged lands and minerals to a distance of nine nautical miles (about ten and one-half land miles) from their coastlines. The Court's decision does not, however, fix the precise position of the coastline which, particularly in the case of Louisiana, is a problem of considerable magnitude and may only be settled through further litigation. It is anticipated, however, that this will not seriously impair our operations in the Gulf of Mexico.

In February the Federal Government sold a number of leases offshore from Louisiana and Texas. At that sale the Company acquired 11 tracts offshore from Louisiana totaling 51,431 acres, and 23 tracts offshore from Texas totaling 126,720 acres. A significant oil and gas discovery has been made on the 5,000-acre Eugene Island Block 100 tract off Louisiana acquired in this sale. This discovery was followed up with active development drilling, and by year-end the tract was producing 1,200 barrels per day from 5 wells. Exploratory drilling on the new leases offshore from Texas is under way.

Drilling activity by the Company in other fields in offshore Louisiana also continued at a high level throughout 1960 with a total of 136 wells drilled. In the South Pass Block 27 field, on two tracts acquired during 1959, a total of 2,950 barrels per day was being produced from 33 wells by the end of the year. Also an important extension was made to the West Delta Block 30 field. A leading position was maintained in offshore production, which averaged 64,000 barrels of crude oil per day out of the Industry total of 213,000 barrels per day; in 1959 we produced 52,900 barrels per day of the Industry total of 171,400 barrels per day.

Exploration in Texas resulted in several gas condensate discoveries which may result in significant additions to the Company's reserves. These were made on properties held jointly with others at Bryans Mill in East Texas, McAllen Ranch in Southwest Texas, and Blackstone in West Texas. We have other substantial lease holdings in all of these areas. Also of importance were extensions to the Quitman and Clam Lake fields in East Texas and the Person field in South Texas.

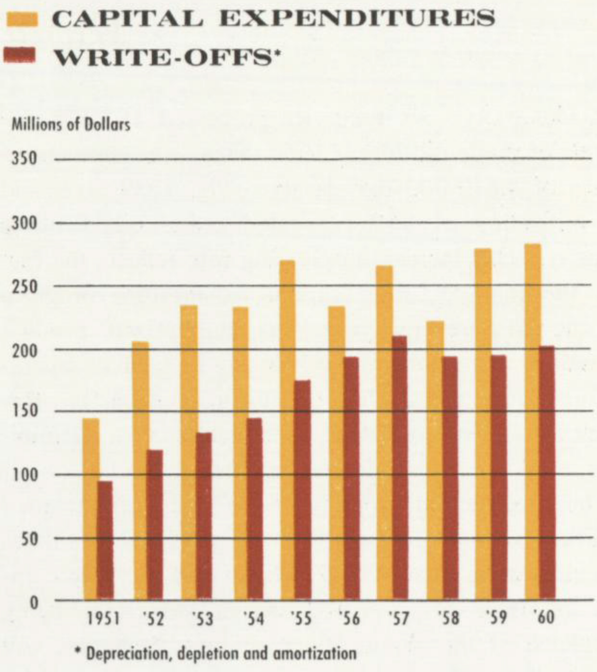
Active development drilling continued in the Anadarko Basin in Oklahoma and the Texas Panhandle, where the Company participated in a total of 75 wells during the year and developed substantial gas reserves. Along the Cedar Creek Anticline in the Williston Basin, continued success was encountered in outstepping from proven production principally in the Pine and Little Beaver East fields.

Secondary oil recovery projects, primarily water flooding, continued to grow in importance during the year, accounting for an increased share of added recoverable reserves. In addition, a number of experimental field tests of both water flooding and other secondary recovery techniques were initiated in order to maintain a strong position in this increasingly important phase of our production activities.

The Company's total crude oil production, including royalty oil, averaged 370,000 barrels per day during 1960 as compared with 366,000 barrels per day in 1959. This represents a gain of 1% and is attributable mainly to increased production in Louisiana.

A total of 166 exploratory wells was drilled during the year, of which 49 resulted in discoveries. In addition, 804 development wells were drilled, of which 702 were oil and gas wells and 102 were dry holes. This compares with a total of 844 development wells drilled in 1959 of which 758 were oil and gas wells and 86 were dry holes.

Sales of natural gas, which increased approximately 18% over 1959, represent an increasingly important part of our business. During 1960, delivery of gas under new contracts was started, which ultimately will total 100 million cubic feet daily. At year-end we were preparing to deliver an additional 154 million cubic feet daily under contracts negotiated during 1960 and prior years. Included among these is one of our largest volume contracts to date, covering initially the sale of 94 million cubic feet daily (Shell's 75% share) from the Elk City Hoxbar Unit in Oklahoma.



* Depreciation, depletion and amortization

The new gas processing plant at Weeks Island went into operation in 1960. At our Sheridan, Texas, plant, plans were under way at year-end for the installation of facilities for the recovery of ethane. This is the first time that any of our gas processing plants will have been equipped for the recovery of this hydrocarbon. Also, two other plants in South Texas for recovery of natural gasoline were under construction at the end of the year.

We are presently involved in a hearing before the Federal Power Commission to evaluate the reasonableness of the prices in all contracts under which we sell gas for transmission across state lines. It is our contention that our price levels are reasonable whether measured by prevailing competitive market prices for gas or by a cost of service study.

# *Manufacturing*

The Company's six refineries processed 183,377,000 barrels of crude oil during 1960. This represents an increase of 4,617,000 barrels above the 1959 level and the utilization of 85% of rated crude oil distilling capacity. This increased operating rate reflects the fact that the manufacturing capital expenditure program for the past several years has emphasized product upgrading and quality improvement as well as operating economy, rather than expansion of capacity. Refinery runs were consistent with maintenance of minimum working inventories of finished products.

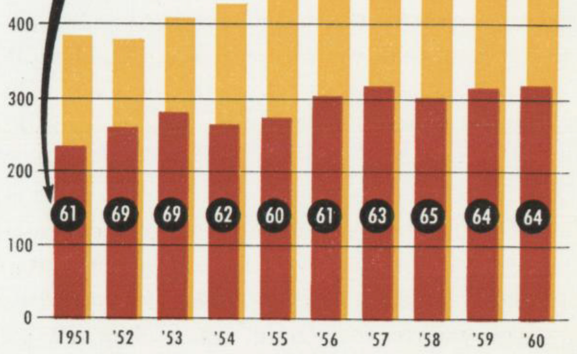
The construction program of the past year included facilities for quality improvement of gasolines, distillates and lubricating oils. The 25,000 barrel per day catalytic reformer of improved design, which is being completed at the Wood River, Illinois, Refinery, will place us in position to meet any customer or competitive pressures on gasoline octane numbers foreseen in the Mid-Continent area for a number of years, while at the same time improving yields and reducing operating costs. Our program to produce superior quality distillate fuels was continued by placing a 30,000 barrel per day hydrotreater in operation at the Houston, Texas, Refinery and by extending the production of improved quality diesel fuel to all refineries. In the lubricating oil field, the expanded facilities for production of high viscosity index oils at Wood River are now operating at capacity. The lubricating oil hydrotreater completed at Houston during 1960 is performing as anticipated, with resultant quality and yield improvements and operating cost economies. Construction of similar lubricating oil hydrotreating facilities at the Martinez, California, Refinery is now under way.

Butane inclusion in gasoline is increased during the winter in order to improve cold weather starting characteristics. This results in a large seasonal variation in overall refinery butane usage. Completion of a 520,000 barrel underground butane storage cavern at Wood River by mid-summer permitted accumulation of 300,000 barrels of this material prior to the 1960-61 winter season. A 260,000 barrel cavern for storage of propane at Wood River is scheduled for completion early in 1961.

Facilities for the production of feed stock for the manufacture of polyisoprene rubber by Shell Chemical Company were placed in operation at the Wilmington, California, Refinery during 1960.

In view of a greatly increased demand and resultant higher price for benzene, various operational changes and plant revisions were made at Houston, Wilmington and Wood River, which increased the annual output rate from the level of 15,000,000 gallons late in 1959 to 52,000,000 gallons by the end of 1960.

Research activities have led to a number of advances in the general field of lubrication. Noteworthy among these has been the development of fully compounded lubricating oils which cannot leave metallic residue deposits when burned. One phase of this program culminated in the production of AeroShell® Oil W, which is receiving growing acceptance by the aircraft industry. This oil is being used extensively by the United States Navy for carrier aircraft and piston



*Ratio of production to intake

engine type radar picket planes. Application of the same principles to the field of automotive lubrication has enabled Shell to usher in a new era of superior motor oils. Following millions of miles of road tests, our new X-100® Motor Oil Premium was offered to the public on August 1.

As an outgrowth of our continuing product development research effort, Shell's industrial lubricants position has been materially strengthened.

A new patented non-soap grease thickener makes grease that does not melt when heated. It has made possible new automotive chassis and bearing greases.

AeroShell® grease 5A is successfully lubricating the X-15 manned rocket plane used to explore to the fringes of outer space.

In the process field, 1960 saw at Martinez the first use of the Shell-developed Rotating Disc Contactor in sulphur dioxide extraction plant service. Performance was highly satisfactory. Rotating Disc Contactor utilization in the de-asphalting section of the Wood River lubricating oil expansion has also yielded excellent results. This equipment effects substantial savings through increasing yields or throughputs in existing installations and in lowering capital costs of new installations.

## *Transportation*

DURING 1960, the Company continued to improve its product distribution systems. The acquisition of Buckley Bros., Inc., a terminal operator and distributor in Bridgeport, Connecticut, provided a tanker terminal to serve southwestern New England, formerly supplied by barge from New York Harbor.

A new products terminal in St. Louis, Missouri, and a 16-mile pipe line connecting it to the Wood River Refinery were completed in 1960. Also, in Madison, Wisconsin, a new products terminal was completed and is now being supplied from our East Chicago Terminal through the Badger Pipe Line. The aviation products terminal in Des Plaines, Illinois, which supplies turbine fuel and aviation gasoline to Chicago's O'Hare Field, was enlarged. A similar terminal supplying Wilmington Refinery's aviation fuels to the Los Angeles International Airport was put into operation early in 1960.

The Company entered into a long-term lease arrangement for the use of a new products terminal at Savannah, Georgia, which is supplied by tanker. This terminal is being operated in conjunction with the asphalt terminal installed there in 1959. A long-term arrangement was also made for terminal service for light oil products in Providence, Rhode Island. In Los Angeles, a lease arrangement was made for the bulk handling of lubricating oils shipped from the Houston Refinery, and lubricant canning facilities at the Wilmington Refinery were expanded. During 1960, facilities were being installed for high cetane diesel fuel at distribution points in the Mid-Continent area, as was done recently in the Gulf, Atlantic Coast and Pacific Coast areas, giving us highest quality fuel for the diesel market.

## *Marketing*

IN 1960, the Industry registered an increase in demand for refined products of nearly 2% over 1959. Our own sales of refined products increased in excess of 3%. However, the unit refined product prices realized in 1960 averaged about 1% below that for 1959. The overall improvement in the supply and demand relationships of crude oil and refined products that occurred in the latter part of the year has tended to firm prices.

Although the consumption of automotive gasoline increased about 3% for the Industry over 1959, it was below expectations primarily because of general economic conditions. In the face of severe competition for this business, the Company maintained its sales virtually at the same level as in 1959.

Continued conversion by airline customers to jet aircraft spurred an increase of 80% in our sales of turbine fuel, which much more than offset a decline in sales of aviation gasoline. The Company continued to be the leading supplier of fuels to domestic airlines. With almost 1,000 trucks, we maintain the largest aviation refueler fleet in the country. The fleet is being improved by the introduction of new 10,000 gallon capacity trucks.

The Company's sales of distillate fuel oils showed a better-than-Industry rate of increase due to the acquisition of new accounts and increased sales to railroads.

Sales of residual fuels increased about 5% compared to a decline in Industry demand of 3%.

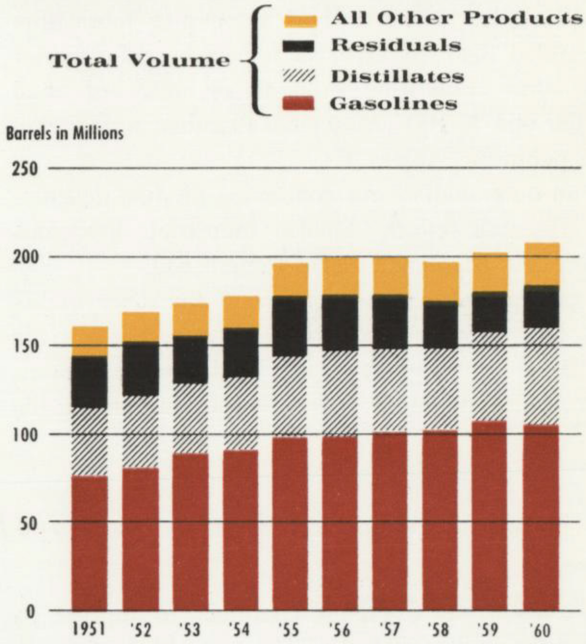
Sales of asphaltic products showed an increase of about 2.5% against no increase for the total Industry.

Sales of lubricants were up 9% over 1959. In August the new dispersant formulation of Shell X-100® Motor Oil Premium was introduced. Acceptance of this product has been good and is expected to improve. Progress was made in the field of fire-resistant hydraulic fluids with the approval received from the U. S. Bureau of Mines for Shell 3XF® Mine Fluid.

Special products had a sales increase of 5.5%, and liquefied petroleum gas sales were up 13% over 1959.

The program of retail outlet development in areas where we currently market was intensified in 1960 with the acquisition of approximately 800 service station sites, offsetting discontinued low volume, substandard outlets and stations lost through condemnations for highway development. In addition, it was decided to reenter the western New York, southern New Jersey, and Fort Worth-Dallas, San Antonio and Austin, Texas, markets.

**REFINED PRODUCTS SALES**



In furtherance of our program of general assistance to dealers, increased emphasis was placed on dealer training, station personnel recruitment, and merchandising and sales promotion techniques. Success of these programs is indicated by continuing increases in average sales per outlet, which in 1960 were up 2% over 1959.

## *Shell Chemical Company*

SALES revenue in 1960 increased marginally to establish a new record; a high level of gains was experienced early in the year, but this tapered off as the year progressed. Several new products were introduced, existing facilities were expanded, new units were completed, and construction at new sites was announced.

Agricultural chemical sales in 1960 were higher than in 1959. This increase was due to the demand for insecticides to combat a record-breaking prevalence of soil insects affecting corn, to increased acceptance of our phosphate insecticides, and to expanded use of our existing chlorinated pesticides in both agricultural and non-agricultural markets. However, there was a substantial reduction in export sales. In most areas of the cotton belt, particularly where boll weevils have developed a resistance to chlorine-containing insecticides, methyl parathion, a phosphate insecticide sold by us and others, was preferentially used.

A powerful new phosphate insecticide for man's fight against flies, mosquitoes and many disease-carrying and food-product-destroying insects was developed. Widespread interest in this product, marketed under the trademark Vapona®, has already developed, and commercial production is under way at our Denver, Colorado, Plant. It was found that Aqualin® herbicide could be successfully used in the control of slime-forming bacteria in pulp and paper mills, and the product shows promise in tests for the control of sulfate-reducing bacteria in secondary recovery oil wells.

New ammonia capacity added by competition late in 1959 and early 1960 perpetuated the low prices and severe competition which have dominated the West Coast nitrogen market during the past five years. In spite of this and the unfavorable weather which was experienced during much of the preplant season, domestic sales were slightly above the level of 1959. Total sales declined slightly from the year before as the result of reduced export sales of solid fertilizers. Significant economies in the manufacture of fertilizers partially offset reduced revenue due to lower prices.

Sales of industrial chemicals continued approximately at the level established in 1959. A strong export demand for certain products was a major factor in this position since our domestic sales, while generally good, failed to keep pace with the sales records established in the second half of 1959. In certain product lines, new capacity caused some overproduction with consequent weakening of prices. Sales of glycerine and other allylic chemicals equaled the high rates established in 1959.

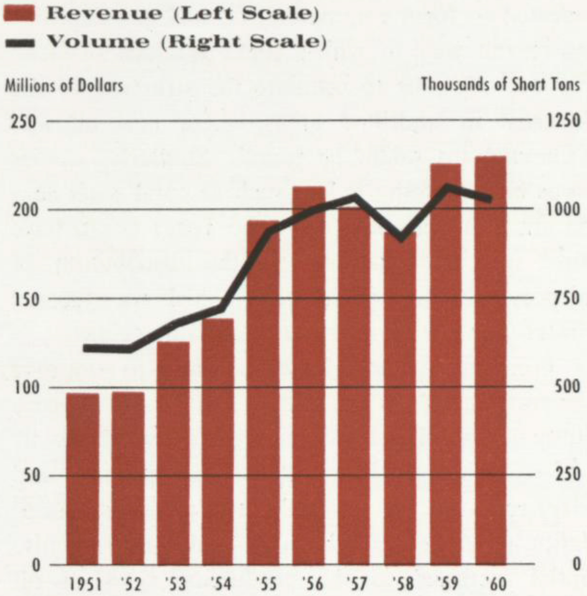
The acrolein-glycerine unit at our Norco, Louisiana, Plant was completed during the year, and acrolein and glycerine are now being produced. With the plant at Houston, which has been operating since 1948, we now have two complete glycerine plants to ensure service to our customers for this important commodity. Expansion of facilities at two plants provided additional capacity for the manufacture of alcohols.

Two new high boiling solvents, marketed under the trademarks Pent-oxone and Pent-oxol, were introduced during the year. They are used to advantage in a variety of surface coatings, particularly automotive and furniture finishes, and vinyl lacquers applied to household appliances and other consumer products. New facilities for the production of these solvents were completed and bulk deliveries have been initiated.

Additional research and development attention has been directed to new acrolein derivatives, antioxidants and organic peroxides, with a view to increasing our penetration into new markets.

Sales of Epon® resins, particularly the liquid grades which are used in casting, potting, encapsulating, road surfacing, floor surfacing and adhesives, increased over previous years. Several new grades of Epon resins, Epon resin foam formulations, curing agents and Epon resin solutions were added to our lines of products. Operation of the phenol unit at Houston, completed

**CHEMICAL SALES**



in the Fall of 1959, proceeded successfully during the year. The test phase of the polystyrene operation at Wallingford, Connecticut was completed early in the year. Sales of polystyrene began in May and a variety of grades, types and colors have been made available to industry. Major additions and alterations have increased the annual capacity to 40 million pounds. Polystyrene is used for television and radio cabinets, refrigerator door liners, toys, housewares, and a wide variety of other items.

Plans to construct a polypropylene plant, research center and technical service laboratory at Woodbury, New Jersey, were announced in the Fall of 1960. Pilot plant samples produced at the Shell Development Company's Emeryville Research Center demonstrate that the planned process yields a material of outstanding uniformity and purity that can be made into a wide variety of products including transparent film, rope, kitchenware and appliance parts. The plant, expected to go on stream early in 1962, will have an initial capacity of 80 million pounds per year.

Sales of synthetic rubber and allied products showed a slight decrease from 1959. During the first half of 1960, sales continued the upward trend of the previous year. However, along with the rest of the rubber industry, our sales decreased markedly during the second half of the year. This period witnessed the steepest drop in natural rubber prices in four years as over all demand declined, foreign manufacturers of general purpose synthetic rubber entered the market, and many companies announced plans to produce the new synthetics, polybutadiene and polyisoprene.

New facilities for the production of Shell Isoprene Rubber, our polyisoprene rubber, came on stream at Torrance, California, expanding annual production capacity to 40 million pounds. Ground has been broken for a similar plant of 80 million pounds per year capacity near Marietta, Ohio.

## *Shell Development Company*

RESEARCH on the fluids and rocks of the earth's crust continues to improve our understanding of the origin of petroleum and the processes by which it becomes concentrated to form commercial oil and gas deposits. Studies of the way in which rocks fracture or bend under stress allow us to estimate the structure of the earth's crust in undrilled areas where new oil and gas accumulations might be found. Similarly, studies of porous beds forming today, such as coral reefs near Florida and sand beaches along the Texas coast, have increased our understanding of the distribution of ancient porous beds of similar origin which are expected to be reservoirs for oil and gas in certain regions.

Our production research seeks ways to improve the efficiency and lower the cost of drilling, to improve our ability to determine the characteristics and economic value of reservoirs, and to improve both primary and secondary recovery. For example, new physicochemical stimulation processes have been devised which promise substantial increases in the production rates of oil and gas wells at relatively small cost.

The design and protection of offshore drilling and producing structures continue to be an important part of engineering research. As a result of this program, Shell Oil Company drilled and brought into production the first oil well completed in the United States with its wellhead equipment placed on the sea bottom, in 56 feet of water.

For many years it has been necessary to use additives in engine lubricating oils to obtain optimum performance; particularly oil stability, engine cleanliness, and low wear. Metal compounds were an essential part of many of these additives, and while they improved the lubricants, the metals also contributed to undesirable engine deposits. Basic research at our laboratories has led to the discovery of new additives which have the beneficial properties needed but are metal-free. These are now being used by Shell Oil Company in new aircraft and automotive engine oils.

Supersonic planes now under development will require fuels able to withstand ever increasing temperatures. Our research has shown how these can be made available from existing refining procedures.

Since the major use for asphalt is in road construction, it is important to be able to evaluate different asphalts and predict reliably their performance. In cooperation with other Shell research laboratories, we have developed a number of instruments and methods now widely used by highway engineers. At the same time we are developing other uses for asphalt, particularly in combination with other materials.

The operation of a modern refinery is extremely complex because of the wide variety of product demands and the many choices to be made in feedstocks and operating conditions. We have developed techniques for using modern high-speed computers to determine the conditions which will provide maximum return.

For some time we have been very active in the study of high polymers, and recent developments are being used in Shell Chemical Company's expansions in this field. Intensive research continues on a number of plastics and elastomers, as well as other industrial chemicals and intermediates.

Among advanced research tools brought into use were a new particle accelerator which produces very high energy neutrons, thus bringing the simplicity and extreme speed of neutron activation analysis to the determination of oxygen, nitrogen and other elements of importance in our business. Also developed was a new combination electron microscope and electron diffraction tool extending our ability to examine and identify microscopic particles or microscopic portions of surfaces far beyond previous possibilities.

During 1960, progress was achieved in a new and important field of research, the use of "plant hormones" to keep leafy vegetables in fresh green condition after harvest. This is but one aspect of an expanding, but still modest, research program in the use of chemicals for biological or agricultural uses in animal production, food preservations, and industrial treatments.

In the insecticide field, increasing attention is being given to the control of insects affecting farm animals. Compounds safe to animals, but highly toxic to insects, are being used both externally and internally to control flies and bots. Development of these new chemicals requires an extensive research program to prove their absolute safety in use. Special care is taken to study inherent toxicity and conditions of use to insure that no toxic residue persists if they are to be used on food crops.

## *Shell Pipe Line Corporation*

THE WORK of modernizing and extending lines was continued by Shell Pipe Line Corporation during 1960; however, no major construction projects were undertaken. Traffic in lines owned by Shell Pipe Line increased slightly above that in 1959.

An extension to our 120-mile Delta Pipe Line System, which moves crude oil from production facilities in the Southwest Pass and Main Pass areas of the Mississippi River Delta to the Norco, Louisiana, Refinery, went into operation during October. This extension transports daily about 10,000 barrels of crude oil which was previously being barged.

The Hendricks-Hobbs Microwave System in West Texas and New Mexico began operating during August. The 66-mile system is the latest addition to Shell Pipe Line's West Texas Division's overall microwave communication and operations control system and links the West Texas Division system with Shell Oil Company's Hobbs-Roswell Microwave System to give complete microwave service from Midland, Texas to Roswell, New Mexico.

Construction on two buildings, which will house Shell Pipe Line's Technical Development Laboratory and its Texas-Gulf Division's Service Center, began during September. The buildings, which are being constructed on a tract in southwest Houston, are scheduled to be completed shortly.

Conversion to automatic operation of the Ozark Pipe

## HEAD OFFICES

Shell Oil Company
New York, N. Y.

Shell Development Company
New York, N. Y.

Shell Chemical Company
New York, N. Y.

Shell Pipe Line Corporation
Houston, Texas

Shell Oil Company of Canada, Limited
Toronto, Ont.

## PRINCIPAL OPERATING HEADQUARTERS

### *Exploration and Production Areas*

Calgary, Alta.
Denver, Colo.
Houston, Texas
Los Angeles, Calif.
Midland, Texas
New Orleans, La.

### *Refineries and Chemical Plants*

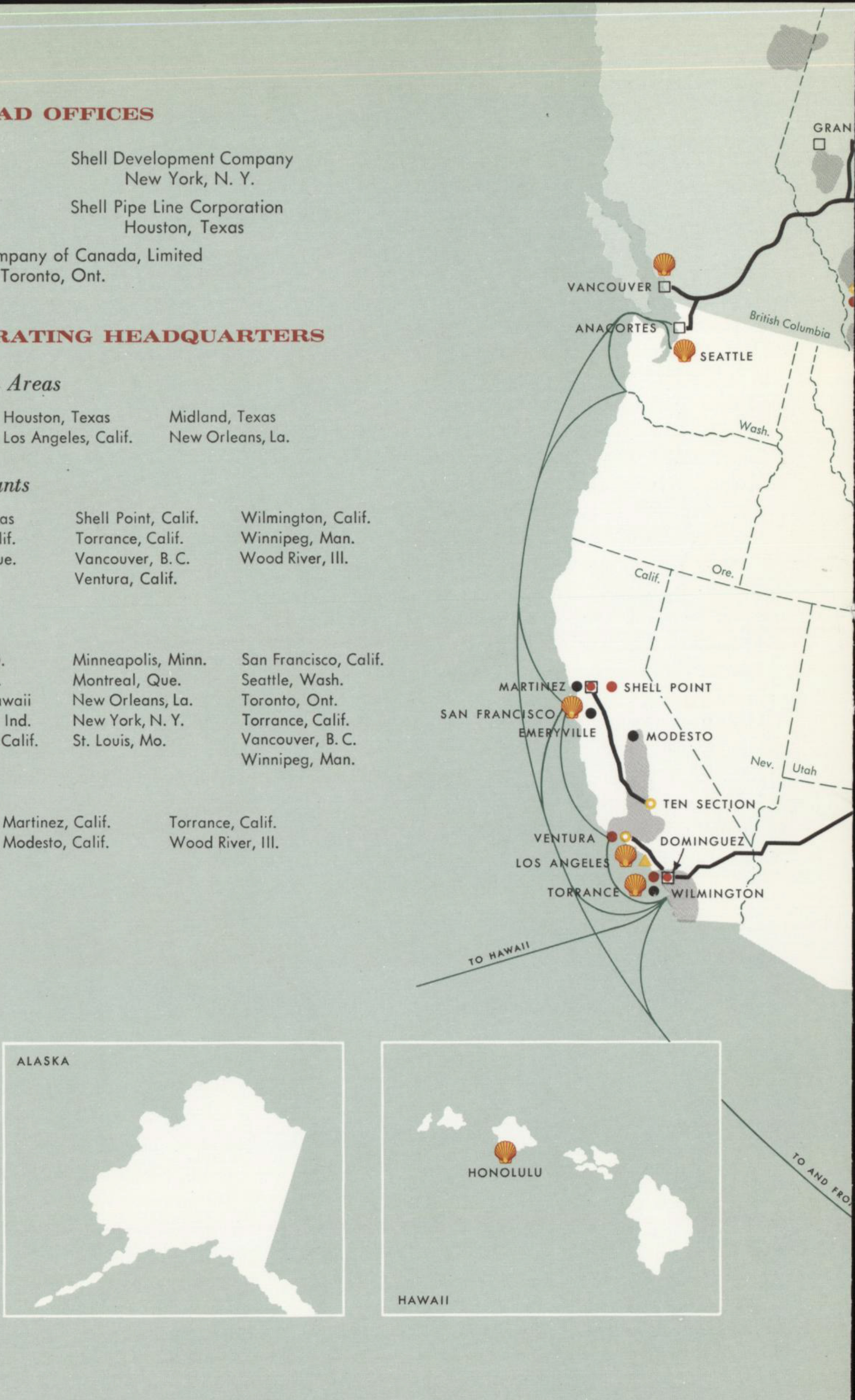
Anacortes, Wash.
Denver, Colo.
Dominguez, Calif.
Grand Prairie, Alta.
Houston, Texas
Martinez, Calif.
Montreal, Que.
Norco, La.
Shell Point, Calif.
Torrance, Calif.
Vancouver, B. C.
Ventura, Calif.
Wilmington, Calif.
Winnipeg, Man.
Wood River, Ill.

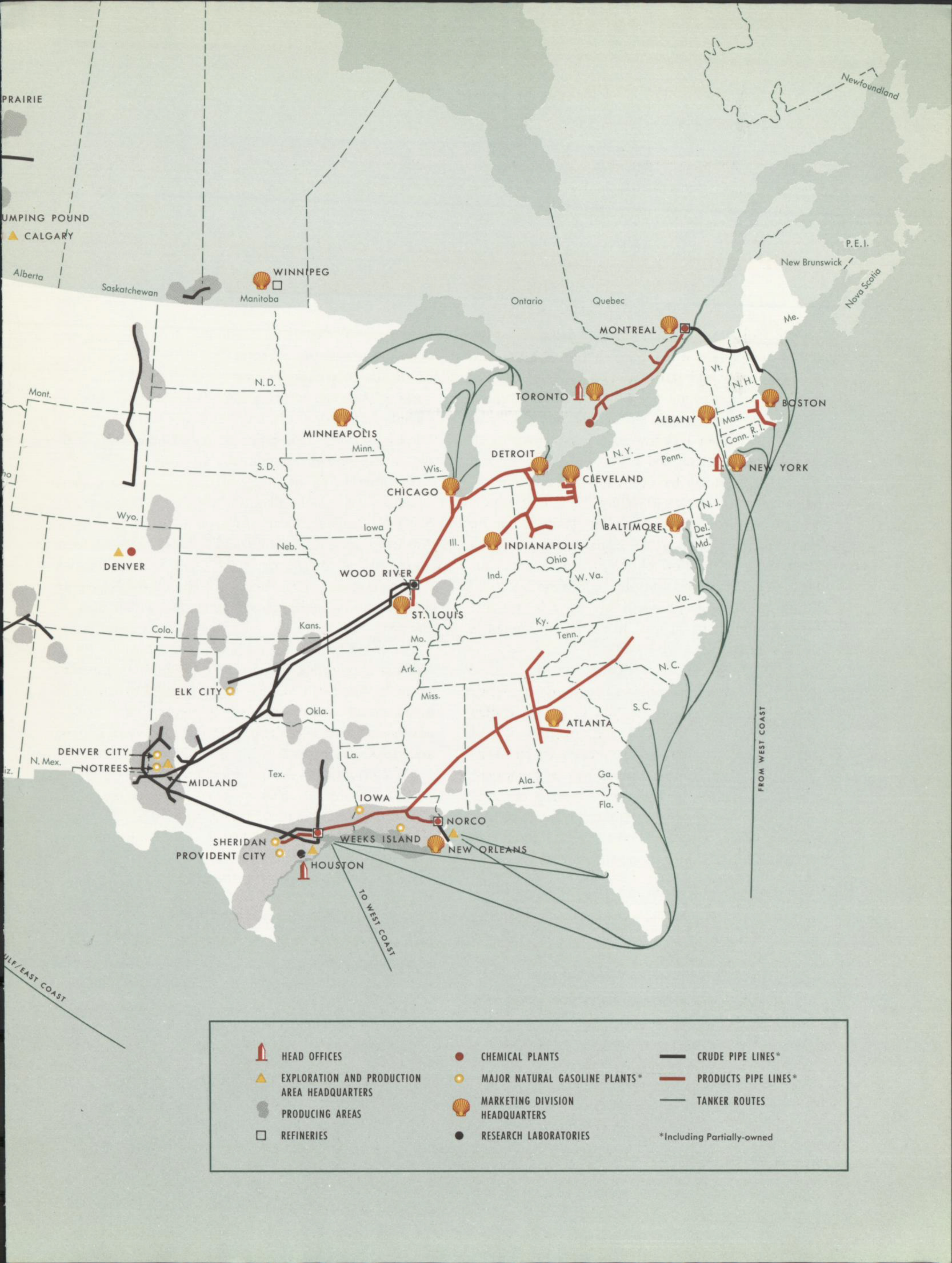
### *Marketing Divisions*

Albany, N. Y.
Atlanta, Ga.
Baltimore, Md.
Boston, Mass.
Chicago, Ill.
Cleveland, O.
Detroit, Mich.
Honolulu, Hawaii
Indianapolis, Ind.
Los Angeles, Calif.
Minneapolis, Minn.
Montreal, Que.
New Orleans, La.
New York, N. Y.
St. Louis, Mo.
San Francisco, Calif.
Seattle, Wash.
Toronto, Ont.
Torrance, Calif.
Vancouver, B. C.
Winnipeg, Man.

### *Research Laboratories*

Emeryville, Calif.
Houston, Texas
Martinez, Calif.
Modesto, Calif.
Torrance, Calif.
Wood River, Ill.




PRAIRIE
UMPING POUND
CALGARY
Alberta
Saskatchewan
WINNIPEG
Manitoba
Ontario
Quebec
Newfoundland
P.E.I.
New Brunswick
Nova Scotia
Me.
MONTREAL
Vt.
N.H.
TORONTO
BOSTON
ALBANY
Mass.
Conn.
R.I.
NEW YORK
N.Y.
Penn.
N.J.
Del.
Md.
BALTIMORE
CLEVELAND
DETROIT
Wis.
CHICAGO
MINNEAPOLIS
Minn.
N.D.
S.D.
Mont.
Wyo.
ho
DENVER
Neb.
Iowa
Ill.
INDIANAPOLIS
Ohio
Ind.
W. Va.
Va.
WOOD RIVER
ST. LOUIS
Colo.
Kans.
Mo.
Ky.
Tenn.
N.C.
S.C.
Ark.
ELK CITY
Okla.
Miss.
ATLANTA
DENVER CITY
NOTREES
MIDLAND
N. Mex.
iz.
Tex.
La.
Ala.
Ga.
Fla.
IOWA
NORCO
WEEKS ISLAND
NEW ORLEANS
SHERIDAN
PROVIDENT CITY
HOUSTON
TO WEST COAST
FROM WEST COAST
ULF/EAST COAST
HEAD OFFICES
EXPLORATION AND PRODUCTION AREA HEADQUARTERS
PRODUCING AREAS
REFINERIES
CHEMICAL PLANTS
MAJOR NATURAL GASOLINE PLANTS*
MARKETING DIVISION HEADQUARTERS
RESEARCH LABORATORIES
CRUDE PIPE LINES*
PRODUCTS PIPE LINES*
TANKER ROUTES
*Including Partially-owned

Line system from Cushing, Oklahoma to Wood River Refinery, in which Shell Pipe Line has a 55% interest, was completed. Shell Pipe Line's 100% owned Cushing-Wood River 10-inch line was converted from manual to automatic operation at the same time.

# *Shell Oil Company of Canada, Limited*

Shell Oil Company of Canada, Limited is a fully integrated company, owned 50% by Shell Oil Company. Its accounts and statistics, and those of its subsidiary companies, are not consolidated in this Report.

The year 1960 in Canada saw a leveling off of economic growth with a business recession appearing at mid-year. The effect on the Industry, where demand for petroleum products has grown at an average rate of 7% in recent years, was to reduce the rate of growth in 1960 to 4.3%. The outlook for 1961 is for an increase in demand of about 3%. In 1960 the Industry benefited from completion of additional facilities for handling natural gas, and Industry sales rose by 20%. Crude oil production, although up by 6% for the Industry, continued to be less than 50% of Canada's potential production.

Canada's National Energy Board and the United States Federal Power Commission approved large-scale movement of natural gas from Alberta to the United States. Included was an initial authorization of 418 million cubic feet per day to be moved to Northern California, of which Shell of Canada will be the largest single supplier. During the year the Alberta Conservation Board had under consideration several plans for transporting gas liquids from Western Canada to the populous markets of the East and the United States.

## *Financial*

In the Annual Report for 1959 it was stated that in January 1960 Shell of Canada had acquired a majority of the voting shares of North Star Oil Limited. Since then it has acquired the remaining voting shares. The total purchase has involved a capital expenditure by Shell of Canada in the amount of $43,181,000.

Apart from the investment in North Star, Shell of Canada's capital expenditures in 1960 amounted to $45,986,000. As in the past, the major portion was concentrated in the exploration and production phase of the business, the results of which are commented upon below. This total for capital expenditures does not include $15,190,000 in cash outlays made in 1960 in connection with exploration activities other than drilling, which were charged directly against income.

In order to enable Shell of Canada to make these expenditures, Shell Oil Company made advances to Shell of Canada during 1960 of $43,450,000, U. S. Advances in equal amount were made by Canadian Shell Limited, the owner of the other 50% of Shell of Canada's stock. The balance of the cash required to meet these expenditures was generated within Shell of Canada's business.

As would be anticipated in the early stages of an oil and gas exploration venture of the size of that undertaken by Shell of Canada, the substantial expense and amortization charges related to leasing and drilling efforts exceeded 1960 income from production, refining and marketing operations by $17,071,000.

To consummate the program for the expansion of its activities in all phases, it is expected that Shell of Canada will require substantial additional sums before it becomes self-sufficient. We anticipate that the company will begin to show cash surpluses and significant net earnings by 1965.

## *Exploration and Production*

During 1960, Shell of Canada continued aggressive exploration activities which resulted in substantial increases in the recoverable oil, gas and sulphur reserves. While underground reserve estimates cannot be too precise at this time, it is estimated that Shell of Canada's so far developed net reserves of crude oil, gas and condensate are equivalent to over 200,000,000 barrels. These figures do not reflect either the reserves proven but not yet developed, or the prospect of additional discoveries from the as yet untested acreage.

A strong land position was maintained and at the end of 1960 the company held approximately 22 million acres net (including acreage of North Star and its wholly-owned subsidiary, Cree Oil of Canada, Limited) under lease, reservation and permit.

During the year, 56 exploratory wells were drilled, of which 4 were successfully completed as oil wells, 13 as gas wells, and 39 were dry holes.

Development drilling during 1960 continued in the Harmattan East, Virginia Hills and Simonette oil fields in Alberta. In southeast Saskatchewan, in addition to the development of primary oil reserves, the company commenced a pilot water flood project for the recovery of secondary reserves in the Midale field. Development of the Waterton and Worsley gas fields progressed in anticipation of gas exports to the United States. The company drilled 154 development wells, of which 132 were oil wells, 12 were gas wells, and 10 were abandoned. This compares with a total of 66 development wells drilled in 1959.

Improved markets for Saskatchewan medium gravity crude oil, together with the continued successful development of the company's oil properties, resulted in a 50% increase in gross production of crude oil and natural gas liquids. Gross production averaged 22,000 barrels a day (including 1,400 barrels a day produced by North Star and its subsidiary, Cree Oil) compared with 14,700 barrels per day in 1959. Natural gas sales remained about the same at 55 million cubic feet daily. Production of sulphur increased sharply to 138 short tons daily.

The company participated in the construction of a gas processing plant for the Homeglen Rimbey field and in a flare gas conservation project for the Harmattan Elkton field.

## *Manufacturing*

The acquisition of North Star added a 12,000 barrel per day refinery at Winnipeg, Manitoba, and a 2,500 barrel per day refinery at Grand Prairie, Alberta, to Shell of Canada's manufacturing facilities. In 1960, total throughput of all four refineries was 31,876,000 barrels.

At year-end the Montreal East Refinery placed in operation a hydrotreater which will ensure continued production of high quality distillate products for Eastern Canada markets.

Improved quality alkylates, used in detergent manufacturing, were produced at the Montreal East Chemical Plant. As a result, Shell of Canada captured a greater share of the detergent alkylate market.

At mid-year, Shell of Canada took under charter the 41,500 DWT "Emerillon", the largest tanker to be built and registered in Canada. This vessel is being employed in supplying crude oil to Montreal East Refinery.

## *Marketing*

Through the acquisition of North Star, with its retail outlets across the Prairie Provinces, coupled with an extension of marketing operations into Canada's Atlantic Provinces, Shell of Canada became for the first time a nationwide marketer.

Volume of sales (including North Star's sales) in 1960 totaled 34,358,000 barrels, compared with Shell of Canada's 1959 volume of 29,962,000 barrels. Extremely competitive marketing practices have characterized the Canadian market for the last two years. Subnormal gasoline prices were widespread throughout the nation during much of the 1960 motoring season.

## *Personnel*

At December 31, 1960, Shell of Canada employed 4,833 people.

During the year there were a number of changes affecting the company's officers. Mr. D. B. Vale, Executive Vice President, accepted an appointment in a Shell company outside Canada, and was succeeded in that office at year-end by Mr. P. L. Kartzke, formerly Vice President, Exploration and Production, Calgary. Mr. Kartzke was succeeded by Mr. J. F. Redmond, formerly Manager, Exploration and Production Economics Department, Shell Oil Company, New York. Mr. G. A. Davidson, Vice President, Manufacturing, retired in June 1960 after 35 years of Shell service and was succeeded by Mr. R. W. Faulk, formerly Manager, Shell Oil Company's Norco, Louisiana, Refinery.

It is with deep regret that we report the death of Mr. A. L. Wilson, Vice President, Ottawa, who had been with the company for 28 years.

## *Personnel and Industrial Relations*

LATE in the year a number of the larger oil and related chemical companies announced or offered a 5% general wage and salary increase to their employees. In order to meet competitive wage movements within and outside the Industry, as soon as the order of magnitude of the increase became clear we announced a similar increase effective December 1, 1960. This was generally acceptable to employee groups, although at a few locations the increase for operating employees was converted to 14¢ per hour.

At the end of the year the total number of employees on the payroll was 38,290, practically unchanged from the end of 1959. The total wages, salaries and employee benefits during 1960 equalled $346,262,000, an increase of $4,695,000, resulting from a number of factors, including the general increase granted late in the year and the increase in Social Security taxes. During the year 589 employees retired from active service. This brought to 5,896 the total number of employees retired since 1938 when the original Shell Pension Plan was established. Throughout the year employee relations within Shell were generally satisfactory.

## *Directorate and Executive*

UPON HIS retirement at the end of the year, Mr. H. S. M. Burns submitted his resignation as President, Chairman of the Executive Committee, and Director of the Company. It was with a feeling of sincere regret that your Directors accepted his resignation.

Mr. Burns joined the Shell Company of California in 1926 as a geophysicist. Following assignments in Manufacturing and in Marketing, and with other Shell companies in London, Venezuela and Colombia, he returned to the United States in 1946 as Senior Vice President of Shell Oil Company, Incorporated, and was elected its President in 1947. Upon its consolidation with the Company in 1949, he became President of the Company.

Your Directors have noted that during these years Mr. Burns has been largely responsible for the Company's greatest growth. It has more than trebled its assets and its sales, and has achieved an eminent position among American corporations. Your Directors wish to record their great appreciation for Mr. Burns' inspiring leadership and valuable and devoted service to the Company.

Mr. Monroe E. Spaght, an Executive Vice President since 1953, was elected to succeed Mr. Burns.

As of April 1, 1960, Mr. H. L. Curtis retired as Vice President in charge of Public Relations after 37 years of Shell service. Mr. Curtis was succeeded by Mr. G. G. Biggar, who was elected a Vice President of the Company. Mr. Biggar joined the Company in 1929 and served in various assignments in Marketing and in the Public Relations Department, of which he had been Manager since 1952.

Mr. P. H. Swinchatt, Vice President of Shell Pipe Line Corporation and Assistant to the President of Shell Oil Company, retired at the end of the year after almost 40 years of service with Shell here and abroad. Mr. E. A. Hugill, Jr., Secretary of the Company, has assumed the added duties of Assistant to the President.

Mr. G. R. Monkhouse, Vice President of Shell Chemical Company, retired at the end of the year after nearly 40 years of service.

# STATEMENT OF INCOME

| | Year 1960 | Year 1959 |
|---|---|---|
| **REVENUE:** | | |
| Sales and other operating revenue | $1,827,831,707 | $1,809,953,048 |
| Dividends, interest and other income | 10,650,891 | 10,001,097 |
| | 1,838,482,598 | 1,819,954,145 |
| **COSTS AND EXPENSES:** | | |
| Operating, selling and general | 1,393,027,694 | 1,373,804,435 |
| Depreciation, depletion, amortization and retirements | 201,019,511 | 195,389,850 |
| Interest on long term debt | 6,445,806 | 4,394,412 |
| Income and operating taxes (Note 2) | 93,401,488 | 98,947,856 |
| | 1,693,894,499 | 1,672,536,553 |
| **NET INCOME FOR YEAR** | $ 144,588,099 | $ 147,417,592 |

# STATEMENT OF FINANCIAL CONDITION

## *Assets*

| | **December 31, 1960** | **December 31, 1959** |
|---|---|---|
| **CURRENT ASSETS:** | | |
| Cash | $ 49,236,689 | $ 57,603,878 |
| U. S. Government and other short term securities, at cost which approximates market | 69,181,522 | 101,855,344 |
| Receivables, less allowance for doubtful accounts: 1960—$5,134,000; 1959—$4,866,000 | 220,058,215 | 197,794,050 |
| Owing by affiliated companies | 8,111,341 | 9,011,077 |
| Inventories (Note 3): | | |
| Crude oil, refined and manufactured products | 195,666,784 | 182,997,691 |
| Materials and supplies | 38,237,700 | 44,065,514 |
| **TOTAL CURRENT ASSETS** | 580,492,251 | 593,327,554 |
| **INVESTMENTS AND ADVANCES, on basis of cost:** | | |
| Shell Oil Company of Canada, Ltd., a 50% owned affiliate | 124,181,902 | 80,731,902 |
| Other affiliated company | 1,080,000 | 1,080,000 |
| Other investments | 5,659,728 | 5,650,460 |
| **TOTAL INVESTMENTS** | 130,921,630 | 87,462,362 |
| **PROPERTIES, PLANT AND EQUIPMENT, at cost (Note 4)** | 2,912,786,306 | 2,713,969,961 |
| Less accumulated depreciation, depletion and amortization | 1,775,892,949 | 1,655,457,471 |
| **NET PROPERTIES, PLANT AND EQUIPMENT** | 1,136,893,357 | 1,058,512,490 |
| **OTHER ASSETS AND PREPAID EXPENSES:** | | |
| Other notes and accounts receivable | 9,056,476 | 6,643,251 |
| Prepaid insurance, taxes, rentals and other expenses | 27,980,717 | 21,363,215 |
| **TOTAL OTHER ASSETS AND PREPAID EXPENSES** | 37,037,193 | 28,006,466 |
| | $1,885,344,431 | $1,767,308,872 |

# *Shell Oil Company and Subsidiary Companies*

## *Liabilities*

| | December 31, 1960 | December 31, 1959 |
|---|---|---|
| **CURRENT LIABILITIES:** | | |
| Accounts payable and accrued liabilities | $ 193,235,293 | $ 189,590,983 |
| Owing to affiliated companies | 6,465,754 | 7,151,486 |
| Long term debt due within one year (Note 5) | 6,302,000 | 28,091,000 |
| Income and operating taxes | 76,273,113 | 83,888,526 |
| **TOTAL CURRENT LIABILITIES** | 282,276,160 | 308,721,995 |
| **LONG TERM DEBT (Note 5):** | | |
| 2½% Debentures due 1971 | 82,352,000 | 88,278,000 |
| Serial notes due 1962 to 1967 | 117,650,000 | 45,200,000 |
| **TOTAL LONG TERM DEBT** | 200,002,000 | 133,478,000 |
| *Shareholders' Investment* | | |
| **COMMON STOCK:** | | |
| Authorized 80,000,000 shares at $1.00 par value; outstanding 60,573,368 shares, at stated value (Note 6) | 227,150,130 | 227,150,130 |
| **AMOUNT IN EXCESS OF COMMON STOCK STATED VALUE** | 243,724,496 | 243,724,496 |
| **EARNINGS EMPLOYED IN THE BUSINESS:** | | |
| Balance at beginning of year | 854,234,251 | 768,904,361 |
| Net income for year | 144,588,099 | 147,417,592 |
| | 998,822,350 | 916,321,953 |
| Cash dividends paid | 66,630,705 | 62,087,702 |
| Balance at end of year | 932,191,645 | 854,234,251 |
| **TOTAL SHAREHOLDERS' INVESTMENT** | 1,403,066,271 | 1,325,108,877 |
| | $1,885,344,431 | $1,767,308,872 |

# NOTES TO FINANCIAL STATEMENTS

**1. General:** The financial statements include the accounts of all wholly owned subsidiary companies.

Intercompany sales and profits of the companies consolidated have been eliminated in the statements to the extent considered practicable.

**2. Income and Operating Taxes Charged to Income:**

| | *Year 1960* | *Year 1959* |
|---|---|---|
| INCOME TAXES | | |
| Federal | $19,900,000 | $28,800,000 |
| Other | 9,865,773 | 10,542,994 |
| | 29,765,773 | 39,342,994 |
| OPERATING TAXES | | |
| Real and personal property | 27,724,524 | 26,047,506 |
| Oil and gas production | 19,736,196 | 18,231,089 |
| Social security | 7,301,464 | 6,220,236 |
| Excise, sales and use | 3,219,099 | 4,024,712 |
| Other | 5,654,432 | 5,081,319 |
| | 63,635,715 | 59,604,862 |
| | $93,401,488 | $98,947,856 |

Taxes on gasoline and other products, collected from customers on behalf of government agencies, amounted to $340,000,000 in 1960 and $320,005,000 in 1959. Such taxes are not included in either revenue or expenses.

**3. Inventories:** As in prior years, the policy has been followed during the year ended December 31, 1960, of charging monthly to cost of goods sold the highest of inventory carrying value, current cost of production, or purchases. The inventories of crude oil, refined and manufactured products are carried at resulting average cost or market, whichever is lower. Inventories of materials and supplies are carried at average cost or less.

**4. Properties, Plant and Equipment:** A summary at December 31, 1960, of gross book value of properties, plant and equipment; related depreciation, depletion and amortization; and net book value, stated in thousands of dollars, follows:

| | *Gross Book Value* | *Depreciation, Etc.* | *Net Book Value* |
|---|---|---|---|
| Production properties | $1,554,848 | $ 910,927 | $ 643,921 |
| Oil refineries and chemical plants | 870,664 | 611,839 | 258,825 |
| Pipe lines and other transportation facilities | 191,601 | 107,092 | 84,509 |
| Marketing and miscellaneous facilities | 295,673 | 146,035 | 149,638 |
| | $2,912,786 | $1,775,893 | $1,136,893 |

**5. Long Term Debt:** At December 31, 1960, long term debt consisted of the following:

| | *Due Within One Year* | *Due After One Year* |
|---|---|---|
| Shell Oil Company | | |
| Twenty-five year 2.50% debentures due 1971, after deducting $1,248,000 of debentures held in treasury. Annual sinking fund payments of $5,000,000 are due in each of the years 1961 to 1970, inclusive. (The debentures held in treasury are available for sale to the sinking fund agent.) | $ 3,752,000 | $ 82,352,000 |
| 4.50% notes payable to bank—payable $33,333,333 in each of the years 1962 to 1964, inclusive | — | 100,000,000 |
| Shell Pipe Line Corporation | | |
| 3.50% notes payable to banks—payable $750,000 in each of the years 1961 to 1965, inclusive, and $2,250,000 in 1966 | 750,000 | 5,250,000 |
| 3.30% notes payable to banks and others—payable $1,000,000 in each of the years 1961 to 1967, inclusive | 1,000,000 | 6,000,000 |
| 4.50% note payable to bank—payable $800,000 in each of the years 1961 to 1965, inclusive, and $3,200,000 in 1966 | 800,000 | 6,400,000 |
| | $ 6,302,000 | $200,002,000 |

**6. Incentive Stock Option Plan:** At December 31, 1960, 604,400 shares of the Company's authorized but unissued common stock were reserved under the Plan for sale to executives and key employees at not less than 95% of the fair market value at the date the option is granted. Generally, options may not be exercised within eighteen months of issuance and expire not later than ten years from date of grant.

At January 1, 1960, options to purchase 486,100 shares were outstanding, of which options for 425,100 shares were exercisable, and 118,300 shares were available for future options. During the year no options were exercised, options were granted to buy 12,000 shares at $31.30 per share and options for 40,700 shares expired. At December 31, 1960, options to purchase 457,400 shares were outstanding, of which options for 435,400 shares were exercisable, and 147,000 shares were available for future options.

**7. Commitments and Contingent Liabilities:** At December 31, 1960, Shell Oil and subsidiary companies had long term leases and other contractual commitments expiring more than three years after that date covering service stations, office space, tankers and other facilities. For the year 1961, the minimum amounts payable (without reduction for related rental income) under such commitments are estimated at $32,000,000.

Shell Oil Company might be required under certain conditions to make payments under guaranty and other contractual arrangements entered into in connection with pipeline transportation of crude oil and refined products. The contingent liability under such arrangements will not exceed $1,500,000 for 1961 and a total of $33,000,000 for years subsequent thereto.

None of the companies had any commitments or contingent liabilities which, in the judgment of the Management, would result in the sustaining of losses which would materially affect their financial positions.

# *Report of Independent Public Accountants*

To the Shareholders of Shell Oil Company:

In our opinion, the accompanying statement of financial condition and related statement of income, together with the notes thereto, present fairly the financial position of Shell Oil Company and consolidated subsidiary companies at December 31, 1960 and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these financial statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

New York
February 28, 1961

# SOURCE AND DISPOSITION OF FUNDS

| | Year 1960<br>Thousands of Dollars | Year 1959<br>Thousands of Dollars |
|---|---|---|
| **SOURCE OF FUNDS** | | |
| Net income | $144,588 | $147,418 |
| Depreciation, depletion, amortization, etc. charged against income | 201,020 | 195,390 |
| Net increase in long term debt | 66,524 | — |
| TOTAL | $412,132 | $342,808 |
| **DISPOSITION OF FUNDS** | | |
| Capital expenditures: | | |
| Drilling and production | $197,639 | $200,337 |
| Oil refineries | 29,140 | 31,524 |
| Chemical plants | 18,014 | 21,267 |
| Pipe lines and other transportation facilities | 6,589 | 5,347 |
| Marketing and miscellaneous facilities | 32,659 | 21,598 |
| | 284,041 | 280,073 |
| Dividends paid | 66,631 | 62,088 |
| Net decrease in long term debt | — | 9,864 |
| Advances to Shell Oil Company of Canada, Limited | 43,450 | 12,000 |
| Other items | 4,400 | (6,085) |
| Working capital increase or (decrease) | 13,610 | (15,132) |
| TOTAL | $412,132 | $342,808 |

# TEN YEAR REVIEW OF STATISTICAL DATA

| | 1960 | 1959 | 1958 |
|---|---|---|---|
| **FINANCIAL AND GENERAL (In thousands except where indicated by †)** | | | |
| Sales and other operating revenue: | | | |
| Refined products and other operating revenue | $1,253,173 | 1,224,384 | 1,177,163 |
| Chemical products | 229,457 | 226,957 | 187,907 |
| Crude oil | 345,202 | 358,612 | 300,919 |
| Total | $1,827,832 | 1,809,953 | 1,665,989 |
| Net income | $ 144,588 | 147,418 | 128,583 |
| Net income per share†* | $ 2.39 | 2.43 | 2.12 |
| Cash dividends | $ 66,631 | 62,088 | 60,573 |
| Cash dividends per share†* | $ 1.10 | 1.02½ | 1.00 |
| Cash income (net income plus write-offs) | $ 345,608 | 342,807 | 323,148 |
| Income and operating taxes charged to income | $ 93,401 | 98,948 | 66,214 |
| Taxes collected from customers on behalf of government agencies | $ 340,000 | 320,005 | 287,765 |
| Capital expenditures | $ 284,041 | 280,073 | 223,082 |
| Exploration expenses, other than drilling | $ 69,833 | 64,683 | 61,135 |
| Properties, plant and equipment (gross) | $2,912,786 | 2,713,970 | 2,516,309 |
| Working capital (current assets less current liabilities) | $ 298,216 | 284,606 | 299,738 |
| Long term debt | $ 200,002 | 133,478 | 143,342 |
| Shareholders† | 20,018 | 19,730 | 19,307 |
| Shares outstanding | 60,573 | 60,573 | 30,287 |
| Employees† | 38,290 | 38,217 | 38,572 |
| Salaries, wages and employee benefits | $ 346,262 | 341,567 | 325,352 |
| **EXPLORATION AND PRODUCTION (Barrels in thousands)** | | | |
| Gross crude oil produced (barrels) | 135,420 | 133,428 | 126,771 |
| Gross crude oil produced (daily average barrels) | 370 | 366 | 347 |
| Net crude oil produced (barrels): | | | |
| California | 24,000 | 25,346 | 26,426 |
| Illinois | 2,341 | 2,358 | 2,892 |
| Louisiana | 40,562 | 35,350 | 30,452 |
| Mississippi | 2,566 | 3,039 | 1,428 |
| Montana | 7,264 | 6,274 | 7,166 |
| New Mexico | 5,677 | 6,617 | 6,536 |
| Oklahoma | 3,654 | 3,961 | 4,570 |
| Texas | 23,863 | 24,773 | 22,613 |
| Utah | 2,428 | 3,079 | 3,080 |
| Other | 4,801 | 4,507 | 4,942 |
| Total | 117,156 | 115,304 | 110,105 |
| Net crude oil produced (daily average barrels) | 320 | 316 | 302 |
| Gross natural gas produced (million cubic feet) | 450,590 | 358,764 | 323,438 |
| Net natural gas produced (million cubic feet) | 389,384 | 311,512 | 281,130 |
| Crude oil purchased (barrels) | 198,732 | 194,948 | 164,498 |
| Crude oil sold (barrels) | 127,116 | 130,130 | 101,232 |
| Wells drilled (gross): | | | |
| Oil | 626 | 671 | 623 |
| Gas | 125 | 144 | 110 |
| Dry holes | 219 | 238 | 217 |
| Total | 970 | 1,053 | 950 |
| Exploratory | 166 | 209 | 166 |
| Development | 804 | 844 | 784 |
| Total | 970 | 1,053 | 950 |
| Oil and gas wells producing or capable of producing (gross): | | | |
| Wholly-owned | 9,903 | 9,647 | 9,521 |
| Partially-owned | 7,679 | 7,254 | 6,861 |
| Total | 17,582 | 16,901 | 16,382 |
| Acreage (net—in thousands): | | | |
| Producing | 599 | 552 | 520 |
| Non-producing | 13,395 | 12,509 | 11,675 |
| Total | 13,994 | 13,061 | 12,195 |

* Per share outstanding at each year-end adjusted for stock dividends and splits.

# *Shell Oil Company and Subsidiary Companies*

| 1957 | 1956 | 1955 | 1954 | 1953 | 1952 | 1951 |
|---|---|---|---|---|---|---|
| 1,242,703 | 1,173,446 | 1,102,878 | 1,000,316 | 964,952 | 872,107 | 828,836 |
| 201,918 | 213,630 | 193,860 | 138,809 | 125,811 | 97,763 | 97,522 |
| 319,981 | 248,359 | 194,405 | 172,935 | 178,788 | 172,762 | 146,076 |
| 1,764,602 | 1,635,435 | 1,491,143 | 1,312,060 | 1,269,551 | 1,142,632 | 1,072,434 |
| 152,940 | 150,045 | 139,549 | 130,330 | 131,588 | 109,282 | 108,559 |
| 2.52 | 2.48 | 2.30 | 2.15 | 2.17 | 1.80 | 1.79 |
| 60,573 | 56,443 | 55,066 | 51,525 | 40,614 | 40,412 | 40,412 |
| 1.00 | .93 | .91 | .85 | .67 | .67 | .67 |
| 362,888 | 344,020 | 314,561 | 276,354 | 269,243 | 229,435 | 205,188 |
| 89,662 | 114,372 | 116,715 | 100,995 | 102,112 | 89,730 | 140,885 |
| 282,466 | 256,192 | 225,905 | 210,028 | 203,490 | 176,568 | 150,230 |
| 265,635 | 234,646 | 271,347 | 236,940 | 237,712 | 206,141 | 145,714 |
| 69,531 | 61,252 | 56,209 | 54,167 | 51,631 | 43,996 | 36,566 |
| 2,377,477 | 2,230,652 | 2,056,286 | 1,825,159 | 1,641,020 | 1,464,891 | 1,308,967 |
| 293,765 | 287,253 | 231,255 | 178,580 | 191,695 | 205,855 | 203,582 |
| 166,087 | 197,408 | 201,457 | 137,118 | 143,205 | 149,307 | 132,057 |
| 19,685 | 19,727 | 19,025 | 18,669 | 17,647 | 17,563 | 17,743 |
| 30,286 | 30,286 | 27,533 | 27,480 | 13,740 | 13,471 | 13,471 |
| 40,465 | 39,903 | 38,845 | 35,275 | 34,660 | 33,583 | 31,319 |
| 325,814 | 300,906 | 271,739 | 237,146 | 222,081 | 200,307 | 179,386 |
| 133,879 | 127,804 | 116,579 | 111,681 | 119,068 | 109,605 | 98,684 |
| 367 | 349 | 319 | 306 | 326 | 299 | 270 |
| 28,170 | 29,426 | 29,697 | 33,422 | 35,298 | 30,537 | 24,964 |
| 2,707 | 2,300 | 2,182 | 2,321 | 2,911 | 3,414 | 2,946 |
| 33,190 | 28,483 | 23,352 | 19,883 | 21,598 | 20,034 | 16,865 |
| 132 | 37 | 34 | 37 | 31 | 24 | 24 |
| 6,962 | 4,491 | 1,583 | 919 | 724 | 238 | 4 |
| 5,954 | 6,192 | 5,729 | 4,949 | 4,496 | 3,482 | 2,744 |
| 5,335 | 5,921 | 6,394 | 5,454 | 6,464 | 7,002 | 6,922 |
| 25,654 | 27,336 | 26,219 | 24,978 | 27,604 | 27,355 | 27,799 |
| 181 | 92 | 136 | 4 | — | — | — |
| 7,625 | 7,039 | 6,255 | 5,727 | 5,142 | 4,013 | 3,953 |
| 115,910 | 111,317 | 101,581 | 97,694 | 104,268 | 96,099 | 86,221 |
| 318 | 304 | 278 | 268 | 286 | 263 | 236 |
| 325,526 | 318,932 | 299,894 | 280,594 | 262,556 | 216,164 | 185,292 |
| 280,147 | 277,792 | 261,795 | 243,336 | 228,790 | 188,612 | 161,332 |
| 178,348 | 162,624 | 144,415 | 126,464 | 117,173 | 113,331 | 116,475 |
| 104,357 | 88,428 | 68,883 | 60,761 | 64,731 | 66,086 | 56,226 |
| 868 | 789 | 628 | 703 | 755 | 672 | 447 |
| 93 | 75 | 55 | 68 | 79 | 36 | 34 |
| 313 | 268 | 216 | 225 | 168 | 138 | 92 |
| 1,274 | 1,132 | 899 | 996 | 1,002 | 846 | 573 |
| 269 | 282 | 207 | 211 | 153 | 113 | 92 |
| 1,005 | 850 | 692 | 785 | 849 | 733 | 481 |
| 1,274 | 1,132 | 899 | 996 | 1,002 | 846 | 573 |
| 9,390 | 9,270 | 8,741 | 8,388 | 7,955 | 7,613 | 7,373 |
| 6,121 | 6,155 | 5,535 | 5,327 | 4,643 | 4,481 | 4,387 |
| 15,511 | 15,425 | 14,276 | 13,715 | 12,598 | 12,094 | 11,760 |
| 479 | 459 | 425 | 388 | 391 | 329 | 303 |
| 14,487 | 21,537 | 20,944 | 21,713 | 18,959 | 18,063 | 16,526 |
| 14,966 | 21,996 | 21,369 | 22,101 | 19,350 | 18,392 | 16,829 |

# TEN YEAR REVIEW OF STATISTICAL DATA

| | 1960 | 1959 | 1958 |
|---|---|---|---|
| **MANUFACTURING (Barrels and tons in thousands)** | | | |
| Crude oil distilling capacity (daily average barrels): | | | |
| Anacortes | 55 | 55 | 55 |
| Houston | 128 | 128 | 125 |
| Martinez | 55 | 55 | 55 |
| Norco | 102 | 102 | 95 |
| Wilmington | 68 | 68 | 79 |
| Wood River | 186 | 186 | 175 |
| Total | 594 | 594 | 584 |
| Crude oil intake to distilling units (barrels) | 183,377 | 178,760 | 169,279 |
| Crude oil intake to distilling units (daily average barrels) | 501 | 490 | 464 |
| Products manufactured from natural gas (barrels) | 12,372 | 11,669 | 11,708 |
| Refined products manufactured (barrels): | | | |
| Gasoline | 101,045 | 99,058 | 96,009 |
| Distillates | 51,255 | 46,910 | 40,951 |
| Residuals | 21,264 | 22,611 | 22,775 |
| All other products | 29,125 | 24,901 | 25,087 |
| Total | 202,689 | 193,480 | 184,822 |
| Gasoline purchased (barrels) | 11,223 | 12,692 | 11,501 |
| Distillates and residuals purchased (barrels) | 10,425 | 7,947 | 6,129 |
| Chemical products manufactured (short tons) | 1,123 | 1,027 | 926 |
| Natural gasoline plants: | | | |
| Wholly-owned | 11 | 10 | 11 |
| Partially-owned | 21 | 22 | 20 |
| Total | 32 | 32 | 31 |
| **MARKETING (Barrels and tons in thousands)** | | | |
| Refined products sold (barrels): | | | |
| Gasoline | 104,691 | 106,792 | 101,974 |
| Distillates | 55,107 | 49,125 | 46,009 |
| Residuals | 24,926 | 23,322 | 26,324 |
| All other products | 26,594 | 25,727 | 24,435 |
| Total | 211,318 | 204,966 | 198,742 |
| Refined products sold (daily average barrels) | 577 | 562 | 544 |
| Chemical products sold (short tons) | 1,040 | 1,070 | 935 |
| Natural gas sold (million cubic feet) | 405,857 | 343,614 | 315,171 |
| Marketing facilities: | | | |
| Bulk distributing plants (leased and owned) | 771 | 773 | 784 |
| Retail outlets (leased and owned) | 9,500 | 9,000 | 8,800 |
| Retail outlets (other) | 13,400 | 14,200 | 14,600 |
| **TRANSPORTATION** | | | |
| Trunk pipe line mileage—crude oil (incl. partially-owned) | 5,988 | 6,081 | 5,959 |
| Trunk pipe line mileage—products (incl. partially-owned) | 4,725 | 4,720 | 4,718 |
| Crude oil gathering pipe line mileage (incl. partially-owned) | 2,119 | 2,154 | 2,107 |
| Crude oil transported by pipe lines (million barrel miles) | 90,632 | 86,368 | 78,495 |
| Products transported by pipe lines (million barrel miles) | 21,215 | 20,795 | 20,116 |
| Storage facilities (thousands of barrels) | 99,295 | 95,276 | 94,057 |

# *Shell Oil Company and Subsidiary Companies*

*. . continued*

| 1957 | 1956 | 1955 | 1954 | 1953 | 1952 | 1951 |
|---:|---:|---:|---:|---:|---:|---:|
| 55 | 50 | 50 | — | — | — | — |
| 125 | 125 | 125 | 125 | 125 | 125 | 120 |
| 55 | 55 | 55 | 55 | 55 | 55 | 45 |
| 95 | 95 | 82 | 75 | 50 | 50 | 50 |
| 79 | 79 | 79 | 79 | 79 | 64 | 52 |
| 175 | 175 | 170 | 170 | 170 | 135 | 130 |
| 584 | 579 | 561 | 504 | 479 | 429 | 397 |
| 184,555 | 182,184 | 168,896 | 157,262 | 150,371 | 139,632 | 142,083 |
| 506 | 498 | 463 | 431 | 412 | 382 | 389 |
| 11,918 | 12,442 | 12,054 | 11,472 | 10,827 | 10,539 | 10,268 |
| 100,223 | 98,271 | 91,631 | 84,220 | 81,375 | 74,005 | 74,591 |
| 47,322 | 49,067 | 43,180 | 39,701 | 36,803 | 37,539 | 39,870 |
| 30,285 | 29,634 | 28,710 | 30,632 | 28,961 | 25,082 | 27,281 |
| 25,143 | 23,851 | 24,359 | 21,882 | 23,833 | 19,876 | 17,514 |
| 202,973 | 200,823 | 187,880 | 176,435 | 170,972 | 156,502 | 159,256 |
| 9,698 | 8,466 | 7,840 | 11,407 | 14,160 | 11,243 | 6,961 |
| 5,249 | 7,005 | 5,162 | 3,220 | 6,870 | 9,885 | 5,607 |
| 1,007 | 970 | 891 | 720 | 637 | 546 | 562 |
| 11 | 11 | 11 | 12 | 14 | 14 | 14 |
| 21 | 20 | 19 | 18 | 16 | 12 | 12 |
| 32 | 31 | 30 | 30 | 30 | 26 | 26 |
| 101,748 | 98,715 | 98,135 | 91,278 | 88,528 | 81,023 | 76,010 |
| 47,065 | 48,178 | 45,319 | 40,891 | 38,905 | 40,318 | 37,566 |
| 30,082 | 31,176 | 33,255 | 27,589 | 27,587 | 29,963 | 29,265 |
| 22,575 | 22,455 | 21,507 | 19,005 | 19,329 | 17,707 | 17,369 |
| 201,470 | 200,524 | 198,216 | 178,763 | 174,349 | 169,011 | 160,210 |
| 552 | 548 | 543 | 490 | 478 | 462 | 439 |
| 1,043 | 1,001 | 943 | 732 | 688 | 617 | 618 |
| 319,198 | 311,577 | 294,046 | 285,928 | 222,822 | 176,613 | 146,160 |
| 786 | 790 | 821 | 803 | 807 | 826 | 838 |
| 8,400 | 8,300 | 8,000 | 7,500 | 7,100 | 7,100 | 7,000 |
| 14,800 | 14,700 | 15,100 | 15,200 | 15,600 | 15,400 | 15,300 |
| 5,304 | 5,579 | 5,331 | 4,828 | 4,788 | 4,644 | 4,686 |
| 4,670 | 4,670 | 4,343 | 4,023 | 3,986 | 3,587 | 3,609 |
| 2,040 | 2,246 | 2,083 | 1,978 | 1,932 | 1,821 | 1,775 |
| 80,804 | 77,766 | 73,507 | 68,578 | 65,747 | 69,460 | 66,568 |
| 21,317 | 20,819 | 19,941 | 19,170 | 17,187 | 14,626 | 13,923 |
| 93,970 | 91,852 | 89,285 | 85,404 | 80,153 | 77,347 | 76,246 |